

HFUS3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 232

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 19 AUG 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100 TO 19/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. AN ISOLATED M1 X-RAY EVENT OCCURRED AT 18/2305 IN ASSOCIATION WITH AN ENERGETIC SURGE OUT TO .08 SOLAR RADII FROM THE NORTHWEST LIMB (N06). THIS IS THE LOCATION OF OLD REGION 4563, WHICH WAS JUST 2 DEGREES BEHIND THE LIMB AT THAT TIME. NO RADIO BURSTS OR SWEEPS WERE REPORTED WITH THE EVENT. TWO C-CLASS X-RAY EVENTS FOLLOWED AT 0222 AND 0347 UT. THESE WERE ALSO LIKELY FROM 4563. X-RAY ENHANCEMENTS HAVE DECREASED THROUGH THE DAY AND AT FORECAST TIME THE X-RAY BACKGROUND IS AT A VERY LOW LEVEL. NEW REGION 4565 (S11E61) WAS NUMBERED TODAY. IT WAS FIRST SEEN AS AN A-TYPE SPOT BUT HAS GROWN INTO A BIPOLAR GROUP. REGION 4564 (S09E35) IS STABLE WITH THE EXCEPTION OF AN ACTIVE DARK FILAMENT TO THE SOUTH. A QUIESCENT FILAMENT BEST SEEN NEAR S08W08 ON 17 AUGUST HAS FADED COMPLETELY AWAY. IT WAS PART OF AN ACTIVE FILAMENT COMPLEX WHICH BEGAN RESTRUCTURING ON 16 AUGUST. NO ACTIVITY WAS OBSERVED ON THE EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW THROUGHOUT THE FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z: THE GEOMAGNETIC FIELD WAS MOSTLY QUIET DURING THE PAST 24 HOURS, BUT HAS BECOME ACTIVE SINCE APPROXIMATELY 1800 UT. THE INCREASING LEVEL OF ACTIVITY MAY BE THE ARRIVAL OF DISTURBED CONDITIONS FORECAST TO BEGIN ON 20 AUGUST.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO INCREASE TOWARD MINOR STORM LEVELS TOMORROW. ACTIVE TO MINOR STORM CONDITIONS SHOULD MAXIMIZE ON 21 AUGUST AND BEGIN TO DECLINE BY THE END OF THE FORECAST PERIOD. THIS ACTIVITY IS FORECAST ON THE BASIS OF A FILAMENT DISAPPEARANCE NEAR S10W10 ON 16 AUGUST.

III. EVENT PROBABILITIES 20 AUG-22 AUG

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 AUG 074

PREDICTED 20 AUG-22 AUG 075/075/075

90 DAY MEAN 19 AUG 095

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 AUG 008/010

ESTIMATED AFR/AP 19 AUG 011/018

PREDICTED AFR/AP 20 AUG-22 AUG 020/025-035/045-025/030

SOLTERWARN

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